Vaccine Discourse and Vaccine-Induced Sufferings: Discourse analysis of the promotion and hesitation of vaccination in Japan

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Abstract

The pandemic of the new coronavirus and the introduction of coronavirus vaccines prompted the production of vaccines and vaccine discourses around the world. The same situation has been observable in Japan. The purpose of this study is to discuss what I call "the social phenomenon of vaccines" in Japan. The present article will describe the characteristics of the vaccine discourse and consider the relationship between the vaccine discourse and vaccine-induced sufferings, which refer to the experience of social damages and difficulties caused by vaccines.

Firstly, I will review the research method of the previous studies of vaccination. It has been shown that both pro-vaccine and anti-vaccine existed from the beginning of the history of vaccination, and in that sense, the existence of both pro-vaccine and anti-vaccine can be considered as a part of "the social phenomenon of vaccines" from the beginning. Inspired by the Strong Program, I will explain a method which would enable me to describe both pro and anti-vaccine without a priori assumptions. One such method can be found in the repertoire analysis by Gilbert and Mulkey (1984), who analyzed controversies in scientific research. Following their method, I will explore how the vaccine discourse was developed in Japan. The vaccine discourse in Japan is found in three different types of literature, which discuss vaccine promotion, vaccine harms, and vaccine safety.

Secondly, I will identify three kinds of repertoires: "componentist repertoire", "manipulationist repertoire" and "psychologism repertoire". I will then discuss the features of "the social phenomenon of vaccines" by examining the relationship among these repertoires and how these repertoires work. Finally, I will discuss how vaccine discourse is related to the discourse of vaccine-induced sufferings. In conclusion, vaccination, by its very nature, cannot be separated from the impossibility of direct experience of vaccination. Therefore, the more vaccine develops, the more vaccine discourse flourishes.

Keywords

discourse analysis, repertoire, vaccine, vaccination, drug-induced sufferings

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Introduction

The pandemic of the new coronavirus declared by the World Health Organization (WHO) in March 2020 and the development of vaccines against it prompted the production of vaccines and even the discourse related to vaccines. Around the world, what can be called vaccine discourse has emerged. Japan is no exception. This study discusses the vaccine discourse in Japan and highlights that vaccine discourse in Japan is unique in a sense that it establishes the relationship between the vaccine and vaccine-induced sufferings. It is not simply a discussion of the characteristics of vaccines. Rather, it has a distinctive feature, which is related to the vaccine-induced sufferings. As for the concept of drug-induced sufferings being unique to Japan², such a relationship could be considered a characteristic specific to the vaccine discourse in Japan.

I, along with my colleagues, have been studying "drug-induced sufferings" as an experience of social damage caused by pharmaceuticals (Hongo and Sato, 2023)³. Druginduced sufferings refer to the damage and the difficulties not only in health but also in life, caused by medicines. The discourse on "vaccine-induced sufferings" (hereafter as the "VIS discourse") has been considered as one of these sufferings and has been reformulated recently. Vaccine-induced sufferings are one type of drug-induced suffering that have been legally and institutionally recognized as a damage to be compensated, caused by officially introduced vaccination in Japan. However, in the vaccine discourse, the narratives of the victims and the VIS discourse are often quoted as if they undermined the significance of vaccination (e.g., Iwata, 2020; Kinoshita, 2021; Funase, 2014). The meanings of VIS discourse have often been reformulated arbitrarily and consequently, often taken for granted by the general public. It has been overlooked by sociologists at large. Therefore, as one of the sociological issues in the current situation of widespread vaccine discourse, it is necessary to consider what function those vaccine discourse serve in contemporary Japanese society through the examination of the relationship between VIS and vaccine discourse. In other words, it is necessary to discuss the nature of "vaccine as a social entity" and "social phenomenon of vaccines" in Japan, as they reflect the relationship between VIS and vaccine discourse.

As will be discussed in the next section, most of the previous research on vaccine has focused on the histories of vaccine introductions and the political backgrounds and/or results of such introductions. Some recent research discusses vaccine hesitation. However, there is no research that discusses vaccines as social entities nor that discuss vaccines as social phenomenon in terms of vaccine discourse.

² The term "drug-induced sufferings", according to the research by the author and his colleagues, is a concept unique to Japan. In other countries, the damages caused by drugs have been recognized as the discrete events, such that the damage caused by thalidomide in the 1960s has been considered as the thalidomide incident, and the damage caused by the HIV-contaminated blood products in the 1980s and 1990s as the AIDS incident. However, the concept of drug-induced sufferings makes us consider these cases as the examples of the same social problem as the drug-induced sufferings.

³ (Hongo and Sato, 2023) constitutes of 12 chapters and 10 columns written by 19 authors, as the results of the activities over the decades of the research meetings on drug-induced sufferings.

Then, first and foremost, it is necessary to describe how the vaccine discourse is developing in the Japanese language world. This is because it is necessary to grasp the whole picture of vaccine discourse. As a result of such a description, it will be possible to discuss the nature of the vaccine discourse and the meaning of its distribution in the Japanese language. Next, it will be necessary to discuss what vaccine discourse is doing with the transformation of the meaning of VIS discourse. For if it is largely accepted with its meaning transformed, then there must be a mechanism or situation that makes this possible. Such mechanism will clarify some features of the contemporary society with "vaccines as social entities" and "social phenomenon of vaccines".

1. Review of sociological and anthropological studies on vaccine

As in other countries, prior sociological and anthropological research on vaccines in the Japanese language was accelerated by the Covid-19 disaster. Representative studies in Japan prior to the Covid-19 disaster consisted of historical studies unique to Japan, with references to some U.S. studies. Such studies include a historical study of the introduction of vaccination in the United States (Colgrove, 2006), a study discussing the dilemma of vaccine administration (Tezuka, 2010), a study of the politics connected to vaccine introduction in the United States (Conis, 2015) and a historical study of the vaccination for smallpox in Japan (Kozai, 2019; 2020). In addition, research on rumors surrounding vaccine hesitation (Larson, 2020=2021) and issues related to vaccine-induced suffering without remedy (Noguchi, 2022) were introduced after the pandemic. Except for Larson's study, the others attempt to historically clarify the social reality of vaccines by discussing the background, process and result of vaccine introduction.

Colgrove's study (Colgrove, 2006) is a historical account of the conflict between government (coercion) and individual freedom (choice) in the process of vaccine introduction. This conflict has been a common thread through the vaccine discourse up to the present. Furthermore, it is clear that the eradication of smallpox established the concept of "eradication of viruses," which is one of the ideas behind the current vaccination regime, and that public health policy evolved around this concept. It is also argued that the era of infectious diseases ended with the improvement of nutrition and sanitation associated with modernization, which gave birth to the complexity of the vaccine issue.

Colgrove's discussion points to a number of issues in vaccine research that continue to the present day, not only in Japan. The clarification of the issue of the conflict between the coercive power of the state and the freedom of the individual is especially important. Studies on vaccines in Japan have also discussed this point from several aspects. Tezuka discusses the dilemma that arises in this conflict. He discusses the postwar vaccination administration based on the dilemma that emerged as a result of the vaccination disaster: if vaccinations are not administered, the possibility of contracting infectious diseases increases, while if vaccinations are administered, the risk of adverse health effects due to adverse reactions is increased, which must be compensated for (Tezuka, 2010). And Kozai discusses the process of the introduction of vaccination from the West and how its meaning was interpreted in relation to nationalism and other factors. She also discusses

the discovery and introduction of hygienic thought in Japan and its relationship to a type of Japanese ethic, that death from infectious disease was a natural fate, while death by vaccination was artificial and should be avoided (Kozai 2019).

During the subsequent Covid-19 disaster, Larson's study on vaccine rumors (Larson 2020=2021) was translated, and Noguchi discussed Japan's immunization policies (Noguchi 2022) at a time when the Covid-19 crisis was winding down. Noguchi used the four social movements related to vaccination to discuss Foucault's biopolitics in the position of the state and the neglect of adverse events caused by vaccination as a systemic and structural problematic issue. Furthermore, many studies have emerged as being stimulated by the new vaccine introduced by the Covid-19 disaster (a situation that would eventually lead to its use). However, many of them merely covered less relevant topics to the coronavirus vaccine because the vaccine had not yet been developed (e.g., Mima, 2020).

The recent sociological and anthropological studies of vaccine can be divided into two types. The first one is those that discuss the reasons for vaccine hesitation. It discusses the discourses and attitudes of people who hesitate for vaccinations based on the (implicit) assumption of their effectiveness, or at least their necessity. It also includes the discussion of the ways in which these discourses and attitudes are shaped. The second one is to discuss vaccines as a problem of power in contemporary society. A typical example is the discussion of vaccines as an element of "biopolitics," which is modeled on Foucault's biopolitics. Thus, this one, although not explicitly stated as such, forms a critique of, or contextualizes, opposition to the current state of affairs regarding vaccines (almost mandatory vaccination).

Many studies acknowledge that there is a division or conflict concerning the value or meaning of vaccine and vaccination. A frame of argument is proposed dichotomously; its discussions focus on either the vaccine necessity and effectiveness or its problematic nature. The historical analysis of vaccines (Colgrove, 2006; Kozai, 2019; 2020) reveals that the conflict over vaccines has been observed since the initial introduction of the vaccine. Such a division itself, or the very characteristics of the discourses surrounding it, has to be examined as the focus of the study as a contemporary social phenomenon. Therefore, I argue that it is necessary to consider the conflict itself as a part of the "social phenomenon of vaccines" (i.e., as an inevitable part of that phenomenon). If so, describing the logic of the conflict is one of the ways to clarify the contemporary characteristics of the "social phenomenon of vaccines".

2. Research question and method of analysis

In order to analyze the contemporary characteristics of the "social phenomenon of vaccines", I will focus on the conflict between discourse of vaccine promotion and vaccine avoidance as the object of analysis. Drawing on the principle of impartiality, I look beyond the implicit premise that takes the vaccine promotive question "why vaccine hesitation occurs" as a taken-for-granted fact and the vaccine avoidant attitude as a false one. In

doing so, it will be possible to portray the discourses of both promotion and avoidance as parts of the "social phenomenon of vaccines".

To do this, I first consulted with the Strong Program in the field of sociology of scientific knowledge. The Strong Program is a criterion proposed by David Bloor in his sociological analysis of scientific knowledge. It consists of four principles (tenets) that are as follow; (1) causality, (2) impartiality, impartial with respect to truth/falsity, rational/irrational, and success/failure, (3) symmetry, symmetrical in explanatory style, and (4) reflexivity, explanatory pattern must be applicable to sociology (Bloor 1976: 4-5). Bloor discusses in detail to respond to actual and/or supposed objections to the Strong Program idea. He also discusses the problem of objectivist argumentation as a problem that goes against the Strong Program.

We need to take a critical approach to posting a question such as "Why does vaccine hesitation occur?". The research based on such questions is against the impartiality of the principle above. Describing both discourses of vaccine promotion and vaccine avoidance and giving the same weight has been frequently criticized. However, such criticism would be objectivist and contrary to the Strong Program. Just to clarify, I am not discussing knowledge surrounding vaccines by an analysis with the "social representation" perspective as Bloor did in his research. Rather, in analyzing the vaccine discourse, I am inspired by the four principles above and analyze the mechanisms that make both promotive and avoidant vaccine discourse possible. I discuss the characteristics of vaccine discourses and their relationship to VIS discourses.

In order to analyze the vaccine discourse including both sides, we consider a method in Nigel Gilbert and Michael Mulkey's research on science, which has been described as a prototype for discourse analysis (Gilbert and Mulkey, 1984). Gilbert and Mulkey studied the controversy surrounding the biochemical study of "oxidative phosphorylation," or energy production (ATP) by respiration, which was controversial in the chemical community at that time. In doing so, they did not assume either side of the controversy to be correct in advance, but rather, through describing the characteristics of the discourse on both sides and identifying the specific discourse named "repertoire" used in the talks by both sides, they described the social phenomenon of scientific controversy and examined how the actual social phenomenon of science is constructed (Gilbert and Mulkey, 1984). Following their research, one of the main purposes of this study, along with the principle of impartiality, is to identify any "repertoire" and to describe how it constructs "social phenomenon of vaccines". In other words, rather than assuming one side to be right in advance about the conflict over vaccines, we will find in both sides of discourse the way to construct "social phenomenon of vaccines" and clarify the nature of such phenomenon.

My analytical method is "discourse analysis" that was developed by Gilbert and Mulkey (1984) and their successors. "Discourse analysis" today often refers to a method of analysis in discursive psychology led by social psychologists at Loughborough University in the UK (Potter and Wetherell, 1992; Stoke et al, 2012). As a sociologist, I have been using discourse analysis as a method to describe the social worlds from a sociological point of view, inspired by the prototype, which was originally a method to describe people's

discourse production and operation in the sociology of science (Sato 2006; 2009; 2017; 2022). Discourse analysis here is a method that regards the discourse not as a medium of information transmission, but as a social action that "does something" and constructs social phenomenon and social worlds. In the following sections, we use this method to analyze and describe "what discourse does" to construct such a phenomenon of vaccines.

3. Experience of Vaccine-induced sufferings and vaccine discourse

Before focusing on vaccine discourse of both sides, we clarify VIS discourse as being the experience of vaccine-induced sufferings and how the meaning of VIS discourse is transformed in the context of vaccine discourse. This is one of the starting points of this study and it is necessary to discuss vaccine discourse in Japan in the first place.

3.1 Vaccine-induced sufferings and the Problematic Nature of Vaccines

In Japan, vaccine-induced sufferings have been regarded as an example of drug-induced sufferings. The term "drug-induced sufferings (yakugai in Japanese)" refers to the experience of social damages and difficulties, such as discrimination and exclusion, as well as health problems caused by pharmaceuticals. The term "drug-induced sufferings" is a descriptive concept that indicates not only the side effects and adverse reactions of drugs, which are often discussed only as medical problems related to the body, but also the social difficulties experienced by the victims due to these side effects and adverse reactions, and has become a relatively common concept in Japan since the drug-induced SMON (subacute myelo-optico-neuropathy), that became a major problem in the 1970s (Sato, 2023a). In Japan, it is known as a social problem that has continuously occurred as the thalidomide incident, the drug-induced SMON, the HIV-contaminated blood product induced AIDS incident, etc., starting with the diphtheria vaccination disaster case (1948) that occurred under the GHQ administration after the defeat in the Pacific War. Among these, health and social sufferings caused by vaccine can be called "vaccine-induced sufferings, VIS (wakuchin yakugai in Japanese) (Sato 2023b). The above-mentioned diphtheria vaccination disaster and the MMR vaccine-induced sufferings that occurred in the 1980s are well known as VIS. In recent years, adverse events caused by HPV vaccines have also been included in the discussion⁴.

Most drug-induced sufferings have been revealed through court cases in Japan (Hongo 2023). The first drug-induced sufferings lawsuit was filed in the 1960s for thalidomide. Subsequently, drug-induced SMON, the HIV-contaminated blood product induced AIDS incident, and the blood products induced hepatitis C were all shown to be drug-induced during the trial process, and as a result, were institutionally recognized as such. The term "institutionally recognized" here means that the existence of the drug-induced sufferings

⁴ From the late 1960s to the 1970s, a social problem known as the "vaccine disaster" occurred in Japan, resulting in the revision of the Immunization Law. However, the "vaccine disaster" is not usually considered to be the drug-induced sufferings. This is because the problem was considered to be an institutional inadequacy connected to remedies for adverse reactions after vaccination, rather than a problem related to the vaccine system and its inoculation.

is officially recognized and compensated in some form, through settlement or other means. In particular, the 2008 settlement between the plaintiffs and the government over the drug-induced hepatitis C lawsuit has led to the institutional recognition that drug-induced sufferings are not only a problem of the pharmaceutical administration but also a social problem, including education⁵.

Vaccine-induced sufferings are one such institutionally recognized drug-induced sufferings. The Ministry of Health, Labour and Welfare (MHLW) now conducts educational activities to prevent drug-induced sufferings and records the voices of victims as valuable testimonies, in which the testimony of a victim of MMR vaccine-induced sufferings was recorded.

The following quote was taken from a transcription of that testimony. Here, we would like to consider the characteristics of VIS discourse.

(Source: https://www.youtube.com/watch?v=8aIVDftSGKY).

(Extract 01)

- 1 My daughter was born in June 1989, when the MMR vaccine was introduced in Japan. In
- 2 April 1991, when my daughter was 1 year and 10 months old, her grandmother visited a
- 3 pediatrician with her with an intention of having her vaccinated only against measles. But
- 4 her grandmother was unable to refuse the doctor's recommendation that she only need one
- 5 dose instead of three, so she was given the MMR vaccine. Two years had already passed
- 6 after the introduction of the MMR vaccine and there had been many adverse reactions since
- 7 the beginning, there were still some places like such clinic that were actively promoting
- 8 MMR over measles alone. Why was MMR vaccination not stopped earlier and its safety
- 9 reviewed? Should there be a vaccine that threatens the life and future of a small child? My
- 10 daughter suffered a severe encephalopathy 14 days after the vaccination. Although she
- 11 luckily survived, she was never the same as before. Since then, I have lived with the
- 12 encouragement given by my daughter, who continues to light her candle of life innocently,
- even if she cannot do anything by herself. Even now, however, I still regret that we did
- 14 have the MMR vaccine back then.

In the video, the daughter, who was directly damaged by the vaccine, is shown lying in the foreground, while the victim's father is speaking behind the bed-ridden daughter about their drug-induced experience. What is the victim's father saying here? The vaccine itself is not the problem. If we focus on the last sentence starting from Line 13-14 only, it may appear that way, but if we consider the previous statements from the very beginning, we can see that there was a problem with the safety of the vaccination, and the inadequate safety checks.

Let us delve into this from the discourse analytic perspective. As noted above, the fact that the daughter was disabled by the MMR vaccine-induced suffering is the basis for the problem

⁵ Based on the 2002 settlement between the plaintiffs and the government regarding drug-induced Jacob's disease and the 2008 settlement between the plaintiffs and the government regarding drug-induced hepatitis, the MHLW and the MEXT are currently conducting educational programs regarding drug-induced sufferings.

of vaccine safety and the problem of inadequate confirmation of that safety. However, merely making an issue of the vaccine damage may deny that the present daughter, who is disabled because of such damage, has been living with difficulties ever since. In other words, just talking about vaccine safety may deny and devalue his daughter's precious life. Here the father's dilemma is discursively formulated. A positive formulation is made about the daughter (Line 11-13), in that the father has been encouraged simply by the fact that she has been alive. By saying this, whilst the testimony affirms her daughter's current state of life, complaining about the damage caused by the MMR vaccine is implicitly made. We can recognise that the VIS discourse is produced around the idea that the victims always exist. In other words, this testimony was constructed in the dilemmatic context in which two conflicting situations coexist and are balanced. This excerpt makes visible that discourse on VIS is organized to construct such balanced situations.

3.2. Vaccine-Induced Sufferings in Vaccine Discourse

How is MMR VIS constructed in vaccine discourse? Although it is not widely known for vaccine-induced sufferings, the MMR vaccine was problematic as it was believed to cause autism. The scandal of Dr. Andrew Wakefield's paper pointing this out, published in the famous medical journal "The Lancet" but later found to be fraudulent, with the paper being retracted and Dr. Wakefield's medical license revoked, is something of a staple in vaccine discourse. Although the paper was retracted, it is sometimes said that the relationship between MMR and autism is still being pointed out, while the scandal itself is said to have spawned widespread vaccine hesitation. Many Japanese vaccine discourses also refer to it⁶.

However, the situation is different when it comes to the MMR VIS. A review of vaccine discourses based on books published in Japan in recent years reveals that VIS has been discussed in three ways. One is that it is discussed as a case that points to the toxicity of the MMR vaccine itself. The second is as a case that points to the causes and problems of vaccine hesitation. The last one to be mentioned is as a case that points to issues surrounding vaccine safety. This last one is not so different from the testimony above. Therefore, let us look at each of the first two with examples.

The first example is to refer to the toxicity of the vaccine itself. Funase (Funase, 2014 (No.20 in the Table 1)) mentioned MMR vaccine-induced sufferings in the context of discussing the "cervical cancer vaccine issue".⁷

⁶ For example, "However, because of the fraudulent nature of the research, the Lancet paper was revoked in 2010, and Wakefield's medical license was revoked. Thus, the theory that autism has nothing to do with vaccines appears to have triumphed. However, this is only the beginning, and even now the vaccine-caused theory of autism persists" (Kondo, 2017: 157 (No.29)), and it is argued that the components of the MMR vaccine are the cause of autism (similar points are made in (Utsumi, 2018 (No.32)) and elsewhere). On the other hand, after introducing the history of that scandal, "In the meantime, however, it has gained tremendous support from parents who oppose vaccines and continues to spread disinformation about vaccines" (Kinoshita, 2021: 42 (No.50)), which is also discussed as a prime example of disinformation causing vaccine hesitation.

⁷ In Japan, the HPV vaccine is commonly referred to as the "cervical cancer vaccine." In 2016, 63 people filed lawsuits in four district courts across Japan seeking damages for adverse events caused by this "cervical cancer vaccine". This is called the "HPV Vaccine-induced Sufferings Lawsuit".

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This description focuses on the previously mentioned damage caused by the MMR vaccine medication, particularly the safety issues and the failure to immediately address them (or rather, to cover them up). Nevertheless, while referring to them, by placing them in a different context from the testimonies connected to the MMR VIS, it indicates the problem with the vaccine itself⁸. In other words, the problem of MMR VIS is not a problem of safety or inadequate confirmation of safety, but rather a problem of not confirming or

concealing the toxicity of the vaccine itself. VIS is thus defined as a situation in which the

The Ministry of Health and Welfare initially covered up the fact that the number of victims had increased to such an extent. Even at a meeting of experts, the Ministry had emphasized them never to disclose the fact. One of the reporters who covered the case testified: "The government did not want to investigate the case itself at first, but simply waited for reports of adverse reactions," and "The experts said nothing because they were funded by the pharmaceutical companies." .../All vaccines, without exception, are designated as powerful drugs. .../That is because they are so toxic. (Funase, 2014:

The second example is about the cause of vaccine hesitation. Kinoshita discussed the MMR vaccines-sufferings in the chapter "History of Vaccine Hesitation" in his book (Kinoshita, 2021(No.50)) and even claims that the court results of VIS were too severe and that the mumps vaccine in question "did not have any definite safety problems". Even though the damages caused by VIS were not linked to any judgments about the merits and demerits of vaccines, but just to sufferings experienced by victims, talking of such damages is criticized because those talks are said to have influenced later revisions of the immunization system and media attitudes about the HPV vaccine (Kinoshita, 2021: 151-152(No.50)).

As described above, although VIS is the institutionally recognized damage, many vaccine discourses nowadays do not position it as a damage or difficulty to health and life but rather, discuss issues such as the toxicity of the vaccine itself and the causes of vaccine hesitation. VIS are utilized as a resource, which has been transformed to mean something different from the very experience of vaccine-induced sufferings. In other words, the problematic nature of vaccines and the necessity of vaccines are discussed at a level divorced from the actual experience with vaccines.

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toxicity of a vaccine is exposed.

⁸ The article cited in (Funase, 2014 (No.20)) in this section is from May 12, 2013, although the text refers to the June 12, 2013, Tokyo Shimbun (Newspaper). The reporter mentioned here is Kunihiko Kumamoto (now a professor at Edogawa University), who covered the MMR VIS as a reporter for TV program at the time. Kumamoto's comments, while acknowledging the effectiveness of the vaccine, insist on the necessity of investigating adverse reactions and confirming safety, and do not accuse the Ministry of Health and Welfare (MHW, at that time), as Funase argued. Funase (Funase, 2014) altered the comments to fit his own context (such alterations are characteristic of the series of texts by Funase).

⁹ Although the details are not discussed here, (Kinoshita, 2021(No.50))'s criticisms of VIS are often sloppy and erroneous, not confirming the facts revealed in the trial process and various research studies, not only about MMR vaccine-induced sufferings but also about other vaccine issues.

What is the meaning of this situation? We will analyze both sides of vaccine discourse to discuss the social phenomenon of vaccines and clarify the meaning of this situation.

4. Analyzing vaccine discourse

In order to analyze the vaccine discourse based on the method above-mentioned, we collected general books that discuss vaccines over the past 30 years ("Table 1" at the end of the paper), and first tried to understand what kind of explanations are being developed in these books. For the sake of convenience, we will refer to these books as "vaccine books". The reason for limiting the list to the past 30 years is due to the availability of vaccine books and the fact that the Immunization Law was amended in 1994 to change mandatory immunization to recommended immunization. This was because policy change that rescinded the obligation to immunize was considered to have had a significant impact on vaccine discourse.

The analytical procedure is to describe the vaccine discourses used in each of the vaccine books and to clarify them in terms of "what they are doing". As Table 1 shows, however, vaccine books are not published in a relatively stable manner in each year, and there is some bias depending on the time of year. We will first indicate some changes in the content of such vaccine books.

4.1. Increase of Vaccine-Discourse Production in Recent Year

Referring to the publication years in Table 1, the first major change can be seen in the sharp increase in the number of publications after 2021. In other words, vaccine-discourse production has flourished since 2021. As can be observed from the titles of the vaccine books, this indicates an increase in vaccine-discourse production at a time when the new coronavirus vaccine was approved and produced and would soon be available for vaccination. Of the 60 books on the list, 36 were published after this time, which means that more than half of the vaccine discourses in the past 30 years were related to the new coronavirus vaccine.

Another feature is that half of the vaccine books from 2015 to 2020 are related to the HPV vaccine (It is called as "cervical cancer vaccine" in Japan). Fourteen vaccine books are found from 2015 to 2020, of which 7 are related to the HPV vaccine.

As these indicate, it can be observed that a large part of the vaccine discourses of the last 30 years are related to HPV and new coronavirus vaccines, accounting for two thirds of the total in the current list.

4.2. Categories by the Contents and the Problem of Classification

At first glance, it appears as if there are three main categories of these vaccine books, based on differences in the contents of their arguments. So, let us first mention them.

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(i) Books discussing the safety of vaccines

The first is "books discussing questions about vaccine safety." By "discussing questions about safety," we mean that the authors present issues that raise questions about safety and attempt to resolve those questions by introducing a variety of cases.

For example, No.11 in Table 1, "Don't get the influenza vaccine!" (Mori, 2007 (No.11)), while referring to the effectiveness of the polio vaccine and other effective cases to demonstrate the significance of the vaccine itself, does not address the issue of the effectiveness of the influenza vaccine due to the mutability of the influenza virus. It also discusses the issue of how to indicate the vaccine efficacy rate, the necessity of vaccine production, and the significance of the Maebashi Report (a famous report published in 1987 by the Maebashi City Medical Association on the efficacy of the influenza vaccine), among others. It then argues that influenza vaccination should be a voluntary choice.

In addition, although it is inclined to present the effectiveness of vaccine, "Do Vaccinations 'work"? (Iwata, 2010 (No.12)) discusses both some historical safety problems on vaccination and the problem of vaccine hesitation, taking into account the historical nature of the Maebashi Report above-mentioned and other factors. The author argues that the cases of vaccine-induced sufferings were political and administrative problems unique to the era when they happened. It also argues that the mentality of the general public introducing the schema of "those inflicting damage" versus "suffering victim" has had a significant impact on the social problematization of vaccine-induced sufferings.

(ii) Books discussing vaccine promotion

Next, "books discussing vaccine promotion" (e.g., Kinoshita, 2021 (No.50); Miyasaka, 2021 (No.48); etc.), discuss the "lack of science" that results in vaccine hesitation, attributing vaccine hesitation to ridiculous conspiracy theories and homeopathy, which is denied by biomedicine, on the one hand, and presenting "scientific evidence for vaccine effectiveness" as shown in various studies on the other. The cases of vaccine-induced sufferings are not dealt with in the context of "medical credibility" or even "drug-induced sufferings" which the actual victims of VIS are oriented toward in their narratives. Rather, the books discuss such sufferings in the context of searching for the reason and problem of vaccine hesitation, such that it was a political issue, or that it caused the problem of infectious potential due to the elimination of mandatory vaccination.

(iii) Books discussing the harmfulness of vaccines

Finally, in the "books discussing the harmfulness of vaccines" (e.g., Kondo, 2017(No.29); 2022 (No.52); Funase, 2014 (No.20); 2021 (No.39); Uchimi, 2018 (No.32)), the authors argue that vaccines are harmful not only because they do not work, but also because they are harmful in themselves, as pointed out through cases of adverse reactions to vaccines, vaccine-induced sufferings. The profits of pharmaceutical companies through the introduction of vaccines, and in some cases, the conspiracies of giant conglomerates that control the entire world behind them, are also often discussed. In other words, while presenting the "historical and international debate over vaccine safety", the "international conspiracy" over vaccines is often discussed.

Based on the above, it would appear at first glance that vaccine discourses can be divided into the above three categories. However, it is necessary to consider whether such categorization is appropriate.

We should consider some problems in describing vaccine discourse by categorizing them according to the content of the discussion. The problem is that the criteria for categorization itself is based on our judgment of the reasonableness of the debate over the efficacy of vaccines

For example, if one knows the history of VIS, it is possible to judge that the book once categorized as a "books discussing the safety of vaccines" (e.g., Iwata, 2010, abovementioned) should belong to a "books discussing vaccine promotion" that is organized in the direction of placing the efficacy of vaccines at the outcome of the debate. In other words, for example, Iwata (Iwata, 2010 (No.12)) discusses the fact that there were no lawsuits for damages in the diphtheria VIS incident, that the media made a big issue of the perpetrators even though the defendant company was not the only one with poor manufacturing technology at the time, and that the absence of vaccines would have resulted in an even larger number of infected people. However, it was also known in 2010, when the book was written, that the number of diphtheria cases in Japan was already very small and that it was the media's task or even duty to reveal the problem, including those of the perpetrating companies, especially as there were many deaths, and it was reported that the Ministry of Justice's advice to the Ministry of Health led to the avoidance of filing a lawsuit for damages. Those who are familiar with the history of VIS can see the book as an arbitrary organization of arguments to promote vaccines. However, because the detailed history of vaccine-induced sufferings is generally unknown, it is taken as if it were a neutral argument about vaccines, and the text positions itself as such.

It means that when introducing the categorization of vaccine books by their content, the categorizer's knowledge and judgment may control the classification.

4.3. Three Repertoires of Vaccine Discourse

I would like to describe the vaccine discourse not in terms of its content, but rather in terms of the context it forms and what it "does" in such context. As previous studies of discourse analysis have shown, speech itself shapes the issues of the situation from within the context, while indicating the particular moral space and rationality of speech in the context. Similarly, narratives in vaccine books can be thought of as presenting the claims themselves as rational and appropriate, thereby producing the topics they discuss and their associated moralities on the fly (e.g., Wetherell et al., 1987; Wetherell and Potter, 1992).

One concrete example is Gilbert and Mulkey's study in science (Gilbert and Mulkey 1984), mentioned earlier. Gilbert and Mulkey interviewed both sides of the controversy over phosphorylation oxidation - the controversy over the chemiosmotic hypothesis and the chemical intermediate hypothesis - and instead of judging one of them to be correct and explaining the situation (which is exactly what the scientists participating in the controversy are doing), they identified the discourse common to both as the "empiricist repertoire" and the "contingent repertoire," and also revealed that the "truth-will-out

device (TWOD)" is used as a linguistic device to mediate between them. In other words, they revealed the reality of the social phenomenon of science on the subject of oxidative phosphorylation.

The same kind of discursive behavior can be observed in the vaccine books. This is especially true when asymmetrical explanations of the problematic situation related to vaccines are formulated. While the "books discussing vaccine promotion" argue that the main argument is the efficacy of the vaccines internal performance, and that the problematic situations related to vaccines are not internal to the vaccines, the "books discussing the harmfulness of vaccines" also argue that the main argument is the problematic nature of vaccines, which exists inside of the vaccines, and that the situation that makes vaccines feel effective exists outside of vaccines, namely, manipulating information on vaccination. As such it is observable that they all use similar discursive tools to construct opposed realities.

In the following, therefore, we will present three repertoires that can be identified as vaccine discourses on a careful reading of vaccine books. I coined the terms: 'componentist', 'manipulationist' and 'psychologism' to refer to the repertoires at work.

(i) Componentist Repertoire

Widespread in the vaccine discourse is the discourse that attributes the performance and problems to the vaccine itself. These are what I call "componentist repertoire". These are a set of discourse that reduce a particular practical situation to its components.

For example, in the case of the "books discussing vaccine promotion", the efficacy and benefits are attributed to the components and the inside of the vaccine, while the risks and the problems are more often attributed to the psychological situation of the people who claim such problems, with a few that belong to the vaccine itself such as adverse reactions (they are considered "natural" phenomena).

On the other hand, the widespread tendency in the "books discussing the harmfulness of vaccines" is to attribute the problems of vaccines to vaccines themselves. It goes deeper into the components used in vaccine production (e.g., adjuvants, animal components used in culture, inactivators, preservatives, etc.). In each case, the toxicities are sorted inside the vaccines and those that are detrimental to the claims are sorted outside the vaccines. Furthermore, vaccine-induced sufferings are discussed here as a problem caused by the vaccine itself.

This repertoire is also often found in the "books discussing the safety of vaccines", and is a discourse used when the reader is left to judge the safety of vaccination, with the basis for this judgment being the ingredients (performance) of the vaccine.

(ii) Manipulationist Repertoire

One of the most conspicuous examples of the vaccine discourses is that the problematic situations are established by deliberate manipulation. These are what I call "manipulationist repertoire". These are a set of discourse that shape the reality that a particular problematic situation is caused by some form of manipulation.

For example, in the "books discussing the harmfulness of vaccines", it is possible to observe a set of discourses that claim that side effects, adverse events, and aftereffects caused by vaccines have been designed by the intentional plan or manipulation of the pharmaceutical companies and the governments and conglomerates that influence such companies. The function of the discourses is a rational explanation. That is, things come into being because someone intentionally designs and manipulates them to do so.

On the other hand, in the "books discussing vaccine promotion", it is possible to observe a set of discourse that the social conditions that cause vaccine hesitation are intentionally created by the mass media that strongly support some victims of VIS or those who experience difficulties with vaccines, or by the government agencies that are influenced by public opinion, or by intentionally created disinformation.

In addition, the "books discussing the safety of vaccines" discuss elements that undermine the safety of vaccination by some profit-driven manipulation of information and pressure by the pharmaceutical companies and by the government agencies that supervise them.

(iii) Psychologism Repertoire

Another widely seen form of vaccine discourse is one that reduces the problematic situation to the psychological condition of the target population, rather than to the components of the vaccine. These are what I call "psychologism repertoire". The problematic situation is discussed by reducing it to the psychological situation of the people related to it.

For example, in the "books discussing vaccine promotion", the effectiveness of vaccination is attributed to the performance (ingredients) of the vaccine itself, while the problems associated with vaccination are not caused by the vaccine but by unintentional and psychological factors of the people associated with it. The problems lie in people's mentality caused by the political situation peculiar to the region, or by ignorance and psychological situations that are influenced by misinformation (including the raison d'etre of mothers who organize movements against some vaccination (Muranaka, 2018 (No.30)).

On the other hand, unintentional and psychological matters that cause willingly vaccinating are mainly discussed as brainwashing by manipulation and misinformation about vaccines in "books discussing the harmfulness of vaccines". Psychological repertoire is rarely used in "books discussing the safety of vaccines".

5. Discussion and Conclusion

One of the characteristics of the vaccine discourse is the similarity between the two groups of books that are at opposite ends of the spectrum in terms of content: "books discussing vaccine promotion" and "books discussing the harmfulness of vaccines". Interestingly, it can be observed that the very existence of such a fragmented linguistic network, as well as the discourses used in it, use the same repertoires, even if they are opposite in content.

As we discussed above, "componentist repertoire" deserves attention. Its characteristic is that each narrative is positive to the content of the claim, creating a form of "there is something inside of the vaccine itself". On the other hand, problematic events that are contradictory to the content of the claim are not within the vaccine itself. Such problems constructed outside of the vaccine are often said to be in people's psychology ("psychologism repertoire"), but that psychology is not seen as natural. It is shown to be manipulated and shaped by the mass media and the government, and by the pharmaceutical companies and the conglomerates that influence them ("manipulationist repertoire"). Let us discuss some features of these repertoires.

5.1. Discussion on Statistics and Ethics

Gilbert and Mulkey identified two types of repertoires in the discourse of chemical scientists, "empiricist repertoire" and "contingent repertoire" as mentioned above. Empiricist repertoire was used to indicate the speaker's version of correct belief and the reason for such correctness. Discourse in the experimental papers is a typical one, but scientists also used it in the course of informal talk. Gilbert and Mulkey pointed out its empirical characteristics of an impersonal natural world. Impersonality is vital.

Empiricist discourse is organised in a manner which denies its character as an interpretative product and which denies that its author's actions to relevant to its content. (Gilbert and Mulkey 1984: 56)

Componentist repertoire is very similar to it. Vaccine discourse is not only produced in the scientific world. However, vaccine is a type of product that was invented and developed by scientists. It means that the essential features of vaccine are expected to exist inside of the vaccine as a scientific product. Componentist repertoire is repeatedly observable with impersonal statistical data. Sometimes componentist repertoire is exerted with stories of persons of authority and/or authoritative organizations in history or present. A typical example is the institution, such as WHO, CDC and other authoritative institutions and/or some figure. There are several stories attributing remarkable achievements and crucial problems to components of vaccine. However, statistical data is more often utilized, and such impersonality indicates more powerfully a correct belief, even if it accompanies a dilemma concerning vaccination. As mentioned above, such a dilemma is that while not vaccinating increases the likelihood of contracting an infectious disease, vaccinating creates the risk of having to compensate for adverse health reactions (Tezuka, 2010).

What this dilemma calls for is actually and essentially an ethical argument. As discussed by Kozai (Kozai, 2019), it is arguable, as in a traditional Japanese way, that while infectious disease morbidity due to non-vaccination may be a natural fate, the health hazards caused by vaccination are a man-made disaster and must therefore be avoided. However, by reducing the subject to a number in the statistics, the statistical process shapes the discussion, so that infectious diseases and health hazards are discussed at the same level as some vaccine promotion discourse (e.g., Iwata 2010; Kinoshita 2021). In other words, it limits the discussion to a probabilistic comparison. As such, comparability itself is an ethical statement, because it is a statement of opinion that physical problems

should be treated as similar, regardless of cause. Statistics can obscure or hide them. In this sense, the statistical treatment of the dilemma is both medical and ethical. Componentist repertoire realizes not only the impersonality which constructs expected correctness of belief without any interpretative work, but also the ethical framework in which medical and experimental discussion exert fruitfulness.

5.2. Discussion on the Accounts of False Belief

Gilbert and Mulkey also pointed out that contingent repertoire to indicate incorrect belief and its cause is used much more flexibly and variably (Gilbert and Mulkey 1984: 79). This is because discourse to indicate incorrect belief should be transformed and show flexibility, depending upon the situations and the contexts. It also is observable in vaccine discourse. However, such contingency in vaccine discourse is slightly different from that of the scientific community and more oriented to interests.

That people hold wrong beliefs is not their fault, but rather, because they are ignorant or in a particular psychological situation. However, it is assumed that they are in such ignorance or in a psychological situation because some manipulation has been done to them. Such manipulation is alleged to have been carried out by the mass media, by governments and, in some cases, the mass media and the governments being operated by well-funded corporations and global conglomerates.

The reason why contingent repertoire is vital to indicate incorrect belief is because it resolves interpretative dilemma:

[t]he introduction of the contingent repertoire resolves the speaker's interpretative dilemma by showing that the speech of those in error, although it is not fully scientific, is easily understood in view of 'what we all know about' the typical limitations of scientists as fallible human beings. (Gilbert and Mulkey 1984: 69-70)

It is also similar to manipulationist repertoire and psychologism repertoire. There seem to be two points in understanding these repertoires. One is solving a dilemma. These repertoires do not attribute any responsibility to people who have incorrect belief in vaccines, while people should be rectified and converted. Another point is understandability. Accounts of false belief are not only organized in a way which explains the reasons for false belief by linking it to something outside of vaccine, but also indicate probability and understandability. Such probability and understandability often consist of political and economic interests, based on general didactic stories.

5.3. Discussion on the relationship between Vaccine Discourse and VIS

The social situations surrounding vaccine discourse in Japan have been somewhat different from those of other countries, because vaccine-induced sufferings are officially recognized in Japan. VIS, as with drug-induced sufferings, helps us to understand vaccine and medicine as a social entity, because victims have shown us their social sufferings and the difficulties they have experienced, caused by vaccination and medicine. Their suffering reflects the features of vaccines and helps us to consider the "social phenomenon of vaccines".

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One such difference that can be addressed here is the relationship between vaccine discourse and VIS discourse, discussed in the section 3.1. This is because VIS is a real and crucial experience of suffering, and such a feature of VIS highlights some characteristics of vaccine discourse.

This is not to point out, however, that one is experience and the other discourse. In that sense, VIS discourse, such as the testimony we read above, is also a discourse. Rather, we are pointing out that what makes the vaccine discourse possible is that in both cases the effects and the problematic nature of the component are not being described as an experience. This is an interesting feature of vaccine discourse. For the impossibility of directly experiencing the effects of vaccines is the significant part of what a vaccine is. This, in turn, creates a form of vaccine discourse in relation to social and normative forms of reasoning.

It is precisely for this reason that the VIS discourse is not substituted by most of the vaccine discourse. This is because VIS are shaped as experiential. The experiential feature of VIS is vital. As noted in the previous analysis of the narrative (Extract 01), VIS discourse does not only point out the problematic nature of vaccine safety. It has a very distinctive form to solving a type of dilemma, with a reference to norms specific to the situation, in which the lively physical disability of the victim is not denied, whilst at the same time, the causes of the disability are problematized. In this sense, the direct reference to the suffering experience is what makes VIS discourse unique. It is quite contrary to vaccine discourse. There is a dilemma that the Japanese vaccine discourse has to solve, with reference to VIS. That is why the meaning and the context of VIS has often been distorted in vaccine discourse in Japan.

5.4. Conclusion

In conclusion, inspired by the Strong Program by Bloor and referring to Gilbert and Mulkey's discourse analysis of the scientific controversy, I have identified three kinds of repertoires, "componentist repertoire", "manipulationist repertoire" and "psychologism repertoire" in the recent vaccine discourse in Japan. These repertoires are vital in understanding what the vaccine discourse does in contemporary Japanese society. I have discussed the features of the "social phenomenon of vaccines" by examining the relationship among these repertoires and how these repertoires work. When discussing vaccine hesitation, the causes of such hesitation are often attributed to political situations or biased information by the mass media. However, as Colgrove (Colgrove, 2006) and Kozai (Kozai, 2019; 2020) argue, conflicts over vaccines, including vaccine hesitation, are parts of the "social phenomenon of vaccines". It is not necessarily due to a lack of information among people or a lack of education among people. Rather, it is deeply connected to the impossibility of directly experiencing the effects of vaccines. Medical and ethical statements are brought into the debate about vaccine efficacy and vaccine hesitation, resulting in obscuring reasons underlying vaccine hesitation.

It means that there is a certain irony here. The safer vaccines become, the more vaccine discourse can be produced. VIS discourse consists of linking vaccines to experiences. While improved vaccines and vaccination processes become safer, the production of VIS

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discourses decreases. It will also enable the production of vaccine discourses. This is because the impossibility of direct experience of vaccine effects is becoming more and more widespread.

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Table 1

No	Title	Subtitle	Author	Publisher	Year
1	Caution! Vaccination.	What every parent needs to know, message from the UK	Leon Chaitow	Nousangyoson Bunka Kyokai	1992
2	Is the vaccine safe?	_	Masami Kurokawa	Ootsuki Shoten	1993
3	Murder by Injection	The medical conspiracy against America	Eustace Clarence Mullins, Jr.	Omokagebashi Shuppan	1997
4	The strategy book for"Immunization and Children's Health"	_	Taneki Mouri	Japanmanisist	1997
5	Confessions of a Medical Heretic	_	Robert S. Mendelsohn	Soushisha	1999
6	How are you doing with vaccinations?	You have to know! Various behind-the-scenes information!	Fukui Breastfeeding Consultation Office	Mebaesha	1999
7	Give me back their lives.	Tokai Vaccination Disaster Lawsuit	Association for Tokai Vaccination Disaster Lawsuit	Association for Tokai Vaccination Disaster Lawsuit	2000
8	Iatrogenic disease	"Medical faith" is creating disease.	Makoto Kondo	Kodansha	2000
9	Influenza Vaccine and Medication that You Can't Ask Your Doctor About	_	Keiko Mori	Japanmanisist	2004
10	Before Going for Vaccinations	Put yourself on the side of the child	Keiko Mori and Taneki Mouri	Japanmanisist	2004
11	Don't get the influenza vaccine!	_	Keiko Mori	Futabasha	2007
12	Do vaccinations "work"?	Think about vaccine haters.	Kentaro Iwata	Kobunsha	2010
13	Before Going for Vaccinations, again	_	Editorial Committiee on "Before Going for Vaccinations, again"	Japanmanisist	2011

No	Title	Subtitle	Author	Publisher	Year
14	This is the reality of the murderous medical hare!	One-world rulers who take life and take money at the same time	Shunsuke Funase and Benjamin Fulford	Hikarurand	2013
15	Non-essential medicine	Unnecessary 90% medical care and the fraud of medical authority	Satoshi Uchimi	Sangonkan	2013
16	Medical treatment for murder	Mafia-controlled modern medical system	Benjamin Fulford	Bestsellers	2013
17	Immunization has side effects and disadvantages, so you can choose to be vaccinated.	_	Makoto Yamada	Japanmanisist	2013
18	Mystery of "secret societies" so interesting that you can't sleep	The more you know, the more shocking it is!, KKK, Illuminati and etc.	Shin-ichiro Namiki	Mikasa Shobo	2013
19	We've all talked about cases where we've had trouble with vaccines.	Immunization Practices Learned by the Case	Nozomu Takeshita et al.	Nanzando	2014
20	The Vaccine Trap	Not only ineffective, but super harmful!	Shunsuke Funase	East Press	2014
21	Cervical cancer vaccine case	_	Takao Saito	Shueisha	2015
22	New Version "Before Going for Vaccinations"	_	Vaccine Talk Nationwide	Japanmanisist	2015
23	Medications are killing people.	Toxic effects and detoxification recommendations	Satoshi Uchimi	Take Shobo	2015
24	The New Drug Trap: Cervical Cancer, DementiaThe 10 Trillion Yen Dark Side	_	Toru Toridamari	Bungei Shunju	2015
25	Cervical Cancer Vaccine, Girls and Their Mothers Fighting Adverse Reactions	_	Shoko Kurokawa	Shueisha	2015

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No	Title	Subtitle	Author	Publisher	Year
26	Have you heard the voices of vaccinedamaged families?	_	Noriko Aono	Japanmanisist	2016
27	Pediatricians don't give drugs to their own children.	I'll tell you the drugs you don't need, the vaccines you don't need.	Kayoko Toriumi	Makino Shuppan	2016
28	Sacrificial Girls	Tracing the Dark Side of Cervical Cancer Vaccination Damage	Yoshiyasu Inoue	Gendai Shokan	2017
29	Fear of vaccine side effects	_	Makoto Kondo	Bungei Shunju	2017
30	100,000 uteri	Is that severe cramping a side reaction to HPV vaccine?	Riko Muranaka	Heibonsha	2018
31	Why do the vaccine- induced sufferings happen?	Cervical cancer vaccine was a "genetically modified" drug	Rei Sakanoue et al.	Hikarurand	2018
32	Non-essential vaccine	Some important information to know now	Satoshi Uchimi	Sangokan Shinsha	2018
33	Deadly Choices	How the Anti-Vaccine Movement Threatens Us All	Paul Offit	Chijinshokan	2018
34	Viruses have a history of "scattering".	Covid-19 is the same! The Backside of the Vaccine Business	Seiji Kikukawa	Hikarurand	2020
35	Covid-19 and Vaccine	The Truth Behind the New Virus Riots and the Real Aim of Vaccines	Shunsuke Funase	Kyoei Shobo	2021
36	The whole story of Covid-19 and vaccines	_	Yoshinori Kobayashi and Masayasu Inoue	Shogakukan	2021
37	Would you give a third dose of the corona vaccine? Why I, a doctor, don't vaccinate	_	Mitsugu Shiga	Gentosha	2021

No	Title	Subtitle	Author	Publisher	Year
38	Destroying the Corona Vaccine Illusion	One could have cured oneself in 3 days of sleep!	Masayasu Inoue and Rei Sakanoue	Hikarurand	2021
39	The vaccine will kill you	_	Shunsuke Funase	Kyoei Shobo	2021
40	Stuck	How Vaccine Rumors Start and Why They Don't Go Away	Heidi J. Larson	Misuzu Shobo	2021
41	Covid-19 and Vaccines as Medical Killing	_	Akio Asuka et al.	Hikarurand	2021
42	Now you need to know! The Truth About Vaccines	From the ABCs of Immunization to the New Corona Vaccine	Hiroyuki Sakitani	Shuwa Shistemu	2021
43	New Corona and Vaccines. Were We Right?	_	Mine Soutaro and Hiroyuki Yamanaka	Nikkei BP	2021
44	New Corona Vaccine, the "Truth" No One Told	_	Toru Toridamari	Takarajimasha	2021
45	New Corona Vaccine, Who Gets Side Effects and Who Doesn't	_	Makoto Kondo	Shogakukan	2021
46	New Coronavirus Vaccine	Overcoming Pandemics with Gene Vaccines	Masanobu Sugimoto	Tokyo Kagaku Dojin	2021
47	New Coronavirus Vaccine	Its Real Image and Problems	Keisuke Amagasa	Ryokuhu Shuppan	2021
48	New Corona Vaccine, the Real "Truth"	_	Masayuki Miyasaka	Kodansha	2021
49	People may be happier not knowing about the horrors of the corona vaccine	_	Toku Takahashi et al.	Seiko Shobo	2021
50	Let's all know! Important Talk about the New Corona Vaccine and HPV Vaccine	_	Takahiro Kinoshita	Wani books	2021
51	The Swine Flu Affair	Decision-Making on a Slippery Disease	Richard E. Neustadt and Harvey V. Fineberg	Fujiwara Shoten	2021

No	Title	Subtitle	Author	Publisher	Year
52	The Truth About Zero Adverse Deaths	What we know so far about the future of "With Corona"	Makoto Kondo	Bijinesusha	2022
53	Why the corona vaccine is dangerous	Immunologist's Warning	Hiroshi Arakawa	Kyoei Shobo	2022
54	Vaccine Boundaries	Dynamics of Power and Ethics	Katsuhiko Kokubu	Seiunsha	2022
55	Why the corona vaccine is dangerous 2	Immunologist's Warning	Hiroshi Arakawa	Kadensha	2023
56	Dissolving Illusions	Disease, Vaccines, and the Forgotten History	Roman Bystrianyk and Suzanne Humphries	Hikarurand	2023
57	Coming of a post vaccine-after-effect society	-	Katsuhiko Fukuda	Hikarurand	2023
58	The Corona Vaccine that Deceived the World	_	Toru Toridamari et al.	Takarajimasha	2023
59	Plague of Corruption	Restoring Faith in the Promise of Science	Kent Heckenlively and Judy Mikovits	Gentosha	2023
60	Vaccine-induced Sufferings by New Coronavirus Vaccine	_	Toru Toridamari	Bukkumansha	2023

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